**AMENDMENTS TO THE CLAIMS** 

This listing of claims will replace all prior versions and listings of claims in the

application:

**LISTING OF CLAIMS:** 

1. (Canceled)

2. (Currently Amended) The humidity sensor as claimed in claim 4, wherein the

lower electrode or the upper electrode predominantly contains platinum.

3. (Previously Presented) The humidity sensor as claimed in claim 4, wherein the lower

electrode comprises a porous body.

4. (Previously Presented) A humidity sensor comprising:

an insulating substrate;

a lower electrode, a moisture sensitive layer and an upper electrode successively formed

on the insulating substrate; and

a heater provided in the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a

noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a

portion of the insulating substrate.

5. (Previously Presented) The humidity sensor as claimed in claim 4, comprising a

temperature measurement resistor provided in the insulating substrate.

6. (Original) The humidity sensor as claimed in claim 4, wherein the heater is located

directly below the moisture sensitive layer.

7. (Original) The humidity sensor as claimed in claim 5, wherein the temperature

measurement resistor is located directly below the moisture sensitive layer.

8. (Previously Presented) A humidity sensor comprising:

an insulating substrate; and

a lower electrode, a moisture sensitive layer and an upper electrode successively formed

on the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a portion of the insulating substrate, and

wherein the humidity sensor is adapted for measuring humidity in an atmosphere containing a very small amount of oxygen and containing a reducing gas.

9. (Previously Presented) A humidity sensor comprising:

an insulating substrate; and

a lower electrode, a moisture sensitive layer and an upper electrode successively formed on the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a portion of the insulating substrate, and

wherein a size of pores in the upper electrode is  $0.5-20 \mu m$ .

10. (Previously Presented) A humidity sensor comprising:

an insulating substrate; and

a lower electrode, a moisture sensitive layer and an upper electrode successively formed on the insulating substrate,

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wherein the lower electrode comprises a noble metal, the upper electrode comprises a

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noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a

portion of the insulating substrate, and

wherein a size of pores in the lower electrode is 0.5-20 µm.

11. (Previously Presented) A humidity sensor according to claim 4, wherein a size of

pores in the moisture sensitive layer is 0.05-0.2 µm.

12. (Previously Presented) A humidity sensor comprising:

an insulating substrate; and

a lower electrode, a moisture sensitive layer and an upper electrode successively formed

on the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a

noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a

portion of the insulating substrate, and

wherein particles of ceramic are incorporated in an amount of 1-20 wt% into the upper

electrode.

13. (Previously Presented) A humidity sensor comprising:

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an insulating substrate; and

a lower electrode, a moisture sensitive layer and an upper electrode successively formed

on the insulating substrate,

wherein the lower electrode comprises a noble metal, the upper electrode comprises a

noble metal porous body, and the upper electrode is joined to the moisture sensitive layer and a

portion of the insulating substrate, and

wherein particles of ceramic are incorporated in an amount of 1-20 wt% into the lower

electrode.